

CHART A

$$\begin{array}{c|c} & & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

$$R_1 - N$$
 $(CH_2)_m$ R_2 R_4 N O N C R_5

$$R_1 = -C(=O)(CH_2)_h - OR_{1-3}$$
 2

$$R_1 = -C(=O)(CH_2)_hOH$$
 2'

R₁ =

$$-C(=O)R_{1-1}$$
, or $-C(=O)_i$ -Het

$$R_1 = -C(=O)OR_{1-2}$$
 4

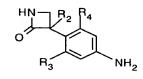
$$R_1$$
 = C_{1-6} alkyl optionally 5 having one or more substituents

 R_1

$$-SO_2(CH_2)_h$$
-aryl



CHART B



10.

$$\begin{array}{c} & \text{PhCH}_2\text{O}_2\text{CN} \\ & \\ & \\ & \\ \text{R}_3 \end{array} \begin{array}{c} \text{R}_2 \\ \text{R}_4 \\ \text{N} \\ \text{CO}_2\text{CH}_2\text{Pr} \end{array}$$





CHART B (Continued)

15





CHART C

$$\begin{array}{c} R_4 \\ OH \\ R_3 \end{array} \longrightarrow \begin{array}{c} NHCO_2CH_2Ph \\ \\ 21 \end{array}$$

$$\begin{array}{c} R_4 \\ \\ PhCH_2O_2CN \\ \hline \\ R_3 \\ \hline \\ 23 \\ \hline \\ I \end{array}$$





CHART D



CHART E

$$CH_3O_2C$$
 CN
 CH_3O_2C
 R_4
 NO_2

noiren nemine

CHART F

roroen ceero

$$\begin{array}{c} R_4 \\ \times \\ OH \\ R_3 \end{array} \qquad \begin{array}{c} NCO_2CH_2Ph \\ H \end{array}$$

$$\begin{array}{c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$





CHART G

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notagaa ngaung

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CHART H



CHART I

5

BOCN
$$OSO_2CF_3$$
 + Me_3Sm $ONHCOR_4$

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notropo perios

57



CHART J

noteen neare

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$